Page 7, beginning line 6:

A2

It should be noted that the number of slots within a transport stream is determined by the relationship between the transport stream clock (i.e., the transport data rate) and the program encoding clocks (i.e., the program data rate). For example, where a transport stream having a 26.97MHz clock rate is used to carry eight programs (i.e., N=8), each program is encoded using a 3.37125MHz clock. In this case, each program to be included in the transport stream is transport encoded using a clock having a frequency of programs that are transport encoded.

Page 8, beginning line 19:

Sub B2

A3

Optional file server 250 is used to store the transport encoded programs streams T_{PROG1}-T_{PROGN} for subsequent transport multiplexing and delivery to, e.g., a subscriber in an information distribution system. For example, if a subscriber in the information distribution system requests a particular movie, the file server 250 retrieves and couples to the transport multiplexer the transport encoded program associated with the particular movie. The transport multiplexer inserts the retrieved program into an appropriate slot within the slotted transport stream for delivery to the subscriber. The subscriber receives information identifying which slot within which slotted transport stream includes the requested movie. The subscriber extracts (and optionally decrypts) the transport packets within the transport stream corresponding to the identified slot such that the transport encoded requested program is received by the subscriber. The received program is subsequently decoded and presented in the appropriate manner on, e.g., the subscriber's television.

Page 10, beginning line 12:

A4

Specifically, a transport stream multiplexer 470 is shown receiving an input transport stream T_{IN}, illustratively a slotted transport stream, and a replacement transport packet (or replacement transport packet stream) R. The transport stream

A4 Cont.

multiplexer 470 receives and examines each packet of the input transport stream T_{IN}. If a received packet is not a NULL packet, then the received packet is coupled to an output as part of an output transport stream T_{OUT}. If a received packet is a NULL packet, and if a replacement packet R is to be inserted into the output stream, then the replacement packet R is inserted into the output as part of the output transport stream T_{OUT}, instead of the NULL packet. In this manner, packets are inserted into the output transport stream T_{OUT} without modifying the previously established timing and distance relationships of the existing packets (i.e., the packets present in the input transport stream T_{IN}).

Page 15, beginning line 19:

A5

The above-described invention provides rapid, cost-effective storage, processing, switching and, generally, delivery of programs to, e.g., a plurality of subscribers. For example, the invention may be utilized within the context of an interactive digital video on demand (VOD) service known as the OnSet™ system, manufactured by DIVA Systems Corporation of Menlo Park, California. The OnSet™ system distributes audio-visual information to individual subscribers utilizing MPEG information streams. The OnSet™ system also allows subscribers to interactively control the delivery of audio-visual information using consumer-friendly commands, such as fast-forward (FF), rewind (REW), pause (PAUSE), play (PLAY) and the like. Within the context of the OnSet™ system, the invention is used to efficiently utilize an available bandwidth within the system such that a maximal number of subscribers are provided with information (e.g., data, movies and the like) in a relatively fair manner (e.g., bandwidth degradation is felt evenly by all subscribers, not just particular classes of subscribers such as low priority/low bandwidth subscribers.